

SPECIFICATION FOR APPROVAL

CUSTOMER	_____
CUST. PART NO.	_____
CUST. DOC. REV.	_____
DESCRIPTION	HIGH CURRENT POWER CHOKE (ROHS+H.F.)
SAMPLE LOT NO.	_____
PART NO.	MCS0618-XXXMHV
DOC. REV.	ORIG
DATE	_____

Once you approve this part, please sign and return this page to the following marked location.

Customer Signature: _____ **Date:** _____

This part currently development section.

Production line can produce this series of products.

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SPECIFICATION FOR APPROVAL

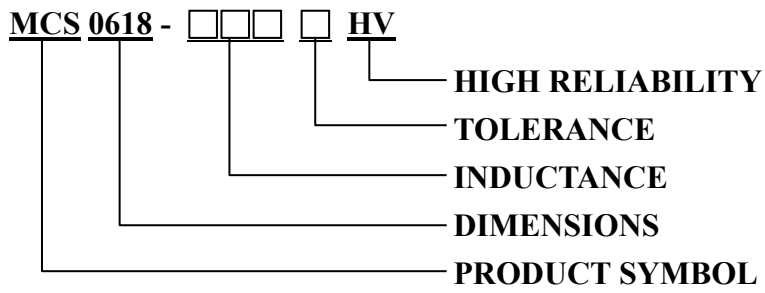
CUSTOMER	CUSTOMER P/N	REV. -	SPL. LOT NO.	
PART NAME HIGH CURRENT POWER CHOKE (ROHS+H.F.)	PART NO. MCS0618-XXXMHV	REV. ORIG	DATE OF ISSUE	Q'TY 0 PCS

ENGINEERING CHANGE NOTICE – RECORD

REVISION NO.	REVISION DESCRIPTION	AUTHOR	DATE	REMARK
ORIG		<i>Gary Chang</i>		

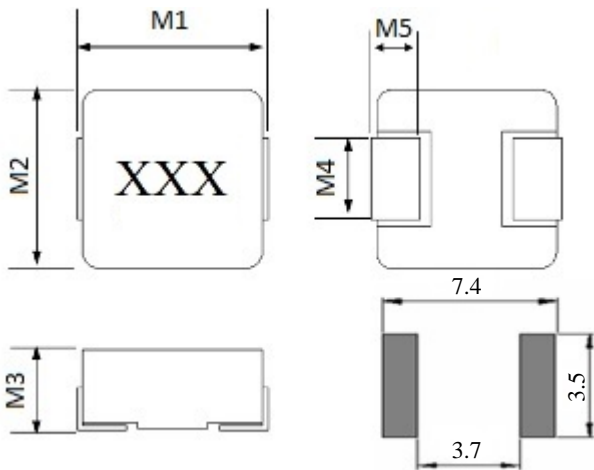
SPECIFICATION FOR APPROVAL

1. PART NUMBERING IDENTIFICATION



2. MECHANICAL DIMENSION

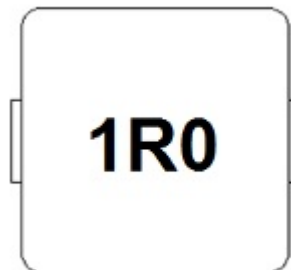
UNIT: mm



	DIM.	TOL.
M1	7.1	±0.3
M2	6.6	±0.3
M3	1.8	MAX.
M4	3.0	±0.3
M5	1.6	±0.5

3. MARKING

Marking ex: 1.0uH → 1R0



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4. ELECTRICAL SPECIFICATION

Part number	Inductance (μ H) $\pm 20\%$	DC Resistance ($m\Omega$) Typical	DC Resistance ($m\Omega$) MAX.	Rated Current (A) Typical	I sat (A) Typical
MCS0618-R22MHV	0.22	5.3	5.7	14	26
MCS0618-R47MHV	0.47	8.4	9.3	11	18
MCS0618-R68MHV	0.68	12.7	13.9	9	17
MCS0618-R82MHV	0.8	13.8	15.9	8	17
MCS0618-4R7MHV	4.7	76.6	78.0	3.0	8

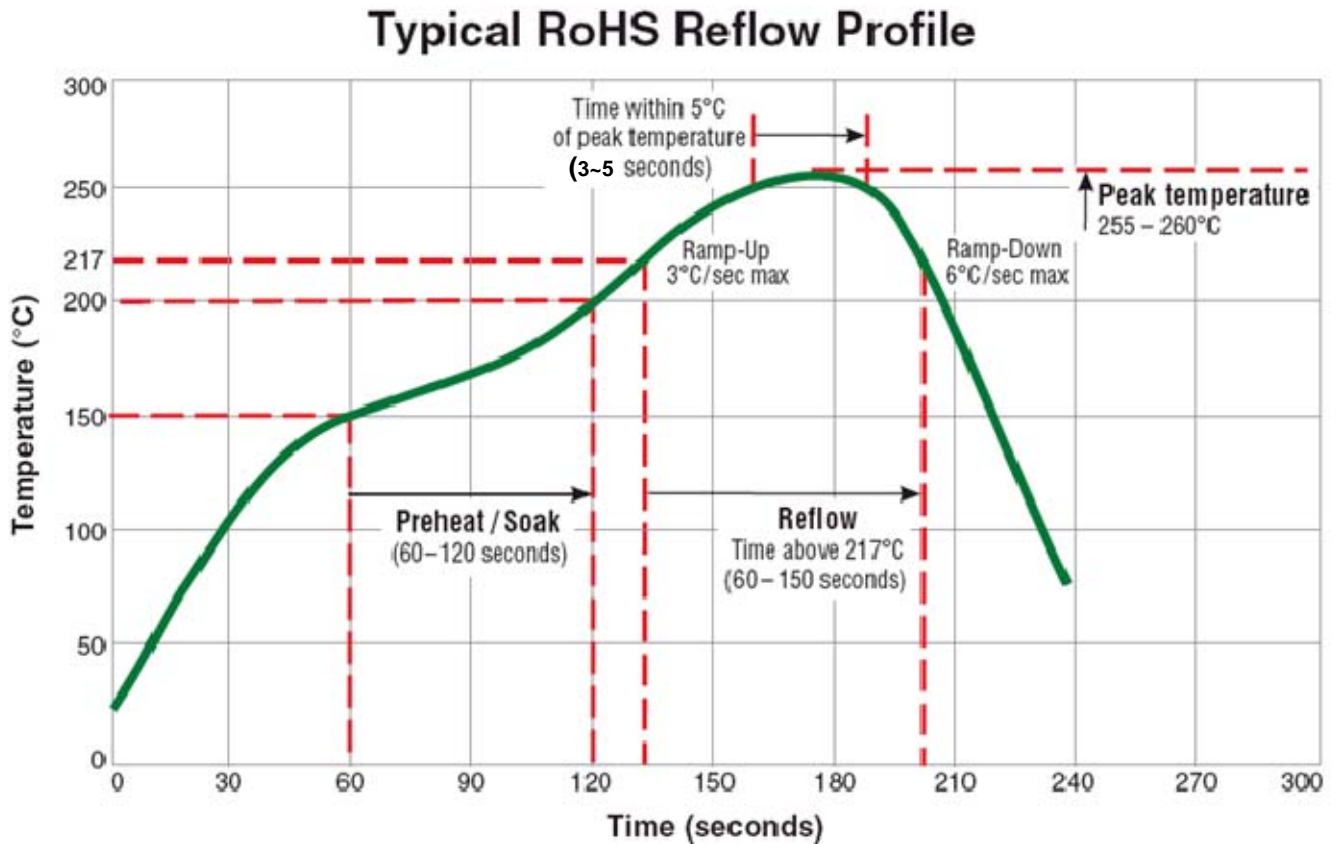
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5. RELIABILITY PERFORMANCE

Test Item	Accept criteria	Test Condition	Standard Source
High Temperature Exposure (Storage)	1.Change from an initial value L:within±20% 2.no visible damage.	1000 hrs. at rated operating temperature (e.g. 125°C part can be stored for 1000 hrs. @ 125°C. Same applies for 105°C and 85°C. Unpowered. Measurement at 24±4 hours after test conclusion.	MIL-STD-202 Method 108
Temperature Cycling	1.Change from an initial value L:within±20% 2.no visible damage.	1000 cycles (-40°C to +125°C). Note: If 85°C part or 105°C part the 1000 cycles will be at that temperature. Measurement at 24±4 hours after test conclusion. 30min maximum dwell time at each temperature extreme. 1 min. maximum transition time.	JESD22 Method JA-104
Biased Humidity	1.Change from an initial value L:within±20% 2.no visible damage.	1000 hours 85°C/85%RH. Unpowered. Measurement at 24±4 hours after test conclusion.	MIL-STD-202 Method 103
Operational Life	1.Change from an initial value L:within±20% 2.no visible damage.	1000 hrs. @ 105°C. If 85°C or 125°C part will be tested at that temperature. Measurement at 24±4 hours after test conclusion.	MIL-PRF-27
Mechanical Shock	1.Within product specification tolerance 2.no visible damage.	Method 213. Condition C, Peak Value: 100g's, Duration: 6ms, Waveform: Half-sine Velocity Change: 12.3ft/sec	MIL-STD-202 Method 213
Vibration	1.Change from an initial value L:within±20% 2.no visible damage.	5g's for 20 minutes, 12 cycles each of 3 orientations. Note: Use 8"X5" PCB, .031" thick, 7 secure points on one long side and 2 secure points at corners of opposite sides. Parts mounted within 2" from any secure point. Test from 10-2000 Hz.	MIL-STD-202 Method 204
Resistance to Soldering Heat	1.No visible damage.	Condition B No pre-heat of samples. Note: Single Wave Solder - Procedure 2 for SMD and Procedure 1 for Leaded with solder within 1.5mm of device body.	MIL-STD-202 Method 210
ESD	1.Change from an initial value L:within±20% 2.no visible damage.	Passive Component Human Body Model (HBM) Electrostatic Discharge (ESD) Test. Only direct contact discharge, record the voltage value what the sample can pass.	AEC-Q200-002 Or ISO/DIS10605
Solderability	1.95% coverage min. good tinning. 2.no visible damage.	For both Leaded & SMD. Electrical Test not required. Magnification 50X. Conditions: Leaded: Method A @ 235°C, category 3. SMD: a) Method B, 4 hrs @ 155°C dry heat @ 235°C b) Method B @ 215°C category 3. c) Method D category 3 @ 260°C.	J-STD-002
Flammability	1.Meet UL94V-0 or V1.	V-0 or V-1 Acceptable	UL-94
Board Flex	1.No drop. 2.no solder connect broken.	60 sec minimum holding time.	AEC-Q200-005
Terminal Strength (SMD)	1.No cracking. 2.no part being sheared off from its pad.	Force of 1.8kg for 60 seconds.	AEC-Q200-006

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6. TYPICAL RoHS REFLOW PROFILE

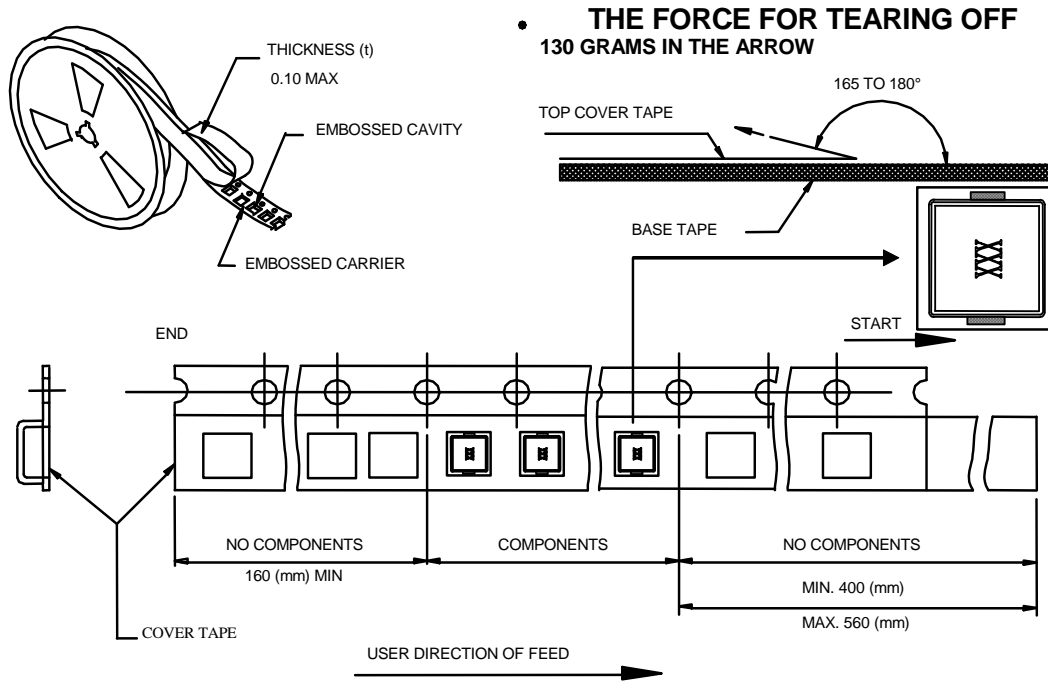


7. NOTE

- ◎ TOLERANCE: M:±20%
- ◎ INDUCTANCE · RATED CURRENT · I sat MEASURED AN HP4284A, CH11025, CH3302, CH1320, CH1320S LCR METER.
- ◎ DCR MESASURED USING A CH16502.
- ◎ CURRENT THAT CAUSES A 15°C TEMPERATURE RISE FROM 25°C AMBIENT.
- ◎ ELECTRICAL SPECIFICATIONS AT 25°C.
- ◎ OPERATING TEMPERATURE: -40°C ~ +125°C.
- ◎ STORAGE TEMPERATURE COMPONENT: -40°C to +100°C. TAPE AND REEL PACKAGING: -40°C to +80°C.
- ◎ MOISTURE SENSITIVITY LEVEL (MSL) 1 (UNLIMITED FLOOR LIFE AT < 30°C / 85% RELATIVE HUMIDITY)
- ◎ GRAPHIC IS ONLY FOR DIMENSIONALLY APPLICATION.
- ◎ THIS IS A RoHS AND REACH COMPLIANT PRODUCT WHOSE RELATED DOCUMENTSS ARE AVAILABLE ON REQUEST.

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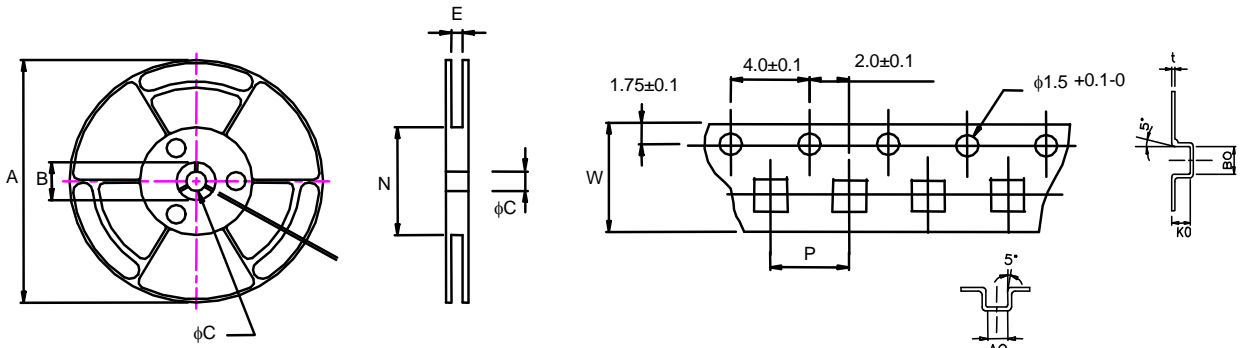
8. PACKAGING



CARRIER TAPE REELS (mm)

MATERIAL: PLASTIC

DIMENSIONS OF CARRIER TAPE (mm)



2000 Parts per Reel

UNIT: mm

	A	B	C	E	N	P	W	t	A0	B0	K0
DIM.	330	25	13	16.6	100	12	16	0.3	7	7.8	2.1
TOL.	±0.2	±0.5	±0.5	±0.5	MIN.	±0.1	±0.3	±0.05	±0.1	±0.1	±0.1